

REMARKS

Claims 1-36 have been canceled without prejudice or disclaimer. Claim 37-? have been added and therefore are pending in the present application. Claims 37-? are supported by claims 1-36.

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

I. The Restriction Requirement

The Office Action made a restriction requirement between sixteen groups. As provided in the Office Action, Applicants provisionally elected Group III, i.e. claims 11-19. Applicants confirm this election. Applicants reserve the right to file continuing applications directed to non-elected subject matter.

Applicants respectfully traverse the restriction requirement between Groups I-XII. The basis for traverse is that there would not be a serious burden on the examiner if restriction were not required. Each of these twelve designated inventions is classified in Class 435, subclass 209. Furthermore, some of the positions recited in the claims of the various groups are the same. For example, several positions recited in claim 11 (Group III) are also recited in claim 21 (Group IV), claim 23 (Group V) and claim 24 (Group VI). Another example is the substitution recited in claim 28 (Group X) is also recited in claim 27 (Group IX). For these reasons, Applicants submit that Groups I-XII should be examined in all application.

II. The Rejection of Claims 11-19 under 35 U.S.C. 112

Claims 11-19 are rejected under 35 U.S.C. 112 "because the specification, while being enabling for a cellulase variant having endoglucanase activity, does not reasonably provide enablement for a cellulase variant with no endoglucanase activity."

Claims 11-19 have been cancelled without prejudice or disclaimer. Furthermore, the newly presented claims recite that the cellulase variants have endoglucanase activity. Applicants therefore submit that this rejection has been overcome.

III. The Rejection of Claims 11-19 under 35 U.S.C. 112

Claims 11-19 are rejected under 35 U.S.C. 112 as being indefinite. The Office provided two grounds for this rejection.

First, the Office objected to the phrase "from the substrate" recited in claims 11, 12 and 17. These claims have been cancelled without prejudice or disclaimer. Furthermore, the newly presented claims do not recite this phrase. Applicants therefore submit that this ground has been overcome.

Second, the Office objected to the phrase "cellulase numbering" because "without the recitation of the specific amino acid sequences at which the recited positions are located, the claims are indefinite." This ground is respectfully traversed.

The specification defines "cellulase numbering" from page 5, line 39 through page 7, line 12. It specifically provides that the positions are numbered according to the amino acid sequence of the cellulase derived from *Humicola insolens* (column (a) of Table 1), i.e., SEQ ID NO:1. In any event, in order to advance the specification, the newly presented claims recite that the positions are numbered according to the amino acid sequence of SEQ ID NO:1.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

IV. The Rejection of Claims 11-13, 15, 17 and 18 under 35 U.S.C. 102

Claims 11-13, 15, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Lund et al. (WO 96/17994). This rejection is respectfully traversed.

Lund et al. disclose cellulase variants modified at one or more of the following positions: 8, 55, 58, 62, 67, 132, 147, 162, 221, 222, 223 and 280.

However, Lund et al. do not disclose the cellulase variants claimed herein. Applicants therefore submit that this rejection has been overcome.

V. The Rejection of Claims 11-19 under 35 U.S.C. 102

Claims 11-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Schulein et al. (WO 94/07998). This rejection is respectfully traversed.

Schulein et al. disclose cellulase variants modified at one or more of the following positions: 2-21, 28, 37, 44-48, 55-60, 62, 63, 65-67, 72-75, 78, 82, 90, 95-103, 104, 109-123, 128-136, 142-148, 158, 163, 175-185, 186, 196, 221, 222, 223, 240 and 241.

However, Schulein et al. do not disclose the cellulase variants claimed herein. Applicants therefore submit that this rejection has been overcome.

VI. The Rejection of Claims 11-19 under 35 U.S.C. 103

Claims 11-19 are rejected under 35 U.S.C. 103 as being unpatentable in view of Davies et al. (*Nature*, 1993, Vol. 365, pp. 362-364). This rejection is respectfully traversed.

Davies et al. disclose the structure of endoglucanase V.

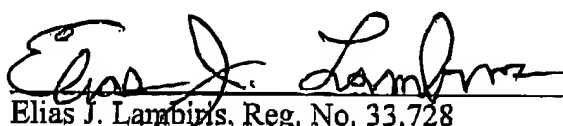
However, Davies et al. do not teach or suggest the cellulase variants claimed herein. Applicants therefore submit that this rejection has been overcome.

VII. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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